REMARKS/ARGUMENTS

Early and favorable consideration of the above-identified application in view of the preceding amendments and the following remarks is respectfully requested. Claims 1-2 and 6-17 are pending in the subject application. In this response, Applicant has amended Claims 1 and 11. No new matter has been added.

Claim Rejections under 35 USC § 103

Claims 1-2, 6-11 and 17 stand rejected under 35 U.S.C. 103(a) as allegedly obvious in view of the teachings of <u>Towle et al</u>. (The spatial location EEG electrodes: locating the best fitting sphere relative to cortical anatomy), <u>Jouudet</u> (US Pat. No. 5,038,285), <u>Fox</u> (US Pat. Pub. No. 2003/0050527) and <u>Tucker</u> (US Pat. No. 5,291,888).

In the Final Office Action, the Examiner has restated his rejection of the claims based on the combination of Towle, Jouandet, Fox and Tucker. Applicant has amended claims 1 and 11 herein to further clarify the distinction between the combined teachings of these four prior art references and the present invention. More specifically, claims 1 and 11 have been amended to note that the minimum distance search method is a method in which comprises the steps of:

(a) providing MRI image data including three-dimensional pixel value data of the brain surface and the head surface,

(b) extracting outlines of the brain surface and the head surface from the MRI image data,

(c) smoothing the extracted brain surface outline,

(d) searching a point on the smoothing processed brain surface outline having the minimum distance from an arbitrary point on the head surface outline,

(e) connecting the searched point on the smoothing processed brain surface outline to the arbitrary point with a line segment,

(f) searching a point of the extracted brain surface outline being closest to a straight line extending from the line segment in the direction of the brain surface, the extracted brain surface outline being not subjected to the smoothing step (c), and

(g) deciding the point obtained by searching step (f) as a projection point on the brain surface corresponding to the arbitrary point on the head surface.

Support for this amendment and the method steps recited therein can be found in paragraphs [0013]-[0014] and especially paragraph [0043] of the originally filed specification, which is a translation of the corresponding International Patent Application.

The amended minimum distance search method includes a smoothing step to the brain surface outline before searching a projection point on the brain surface corresponding to an arbitrary point on the head surface. The smoothing step is followed by a searching step of a point on the smoothened brain surface outline having the minimum distance from an arbitrary point on the head surface outline and a connecting step of the searched point to the arbitrary point with a line segment. The a projection point on the brain surface is obtained as the closest on the brain surface, which is not subjected to the smoothing step, to the straight line extending from the line segment. Including these steps, the amended minimum distance search method has an advantage capable of determining more accurate coordinates of the brain surface and head surface points (see paragraph [0014]). These features are not taught, suggested or disclosed by Towle, Jouandet, Fox and Tucker, either alone or in combination.

In view of the above, Applicant respectfully submits that upon considering the references as a whole for what they fairly teach and suggest to an ordinarily skilled artisan, the combination of the references fails teach each and every feature of currently amended independent claims 1 and 11 as required to support a rejection under 35 USC §103. In sum, none of the reference, alone or in combination, describe or suggest Applicant's "minimum distance search" method as set forth in independent claims 1 and 11.

The rejection of claims 1 and 11, and those claims depending therefrom, should be withdrawn.

Claims 12-16 stand rejected under 35 U.S.C. 103(a) allegedly obvious in view of Towle et al (The spatial location EEG electrodes: locating the best fitting sphere relative to cortical anatomy), Joundet (US Pat. No. 5,038,285) Fox (US Pat. Pub. No. 2003/0050527), Tucker (US Pat. No. 5,291,888), and Yamashita (US Pat. No. to 6,611,698).

Applicant respectfully submits that Yamashita fails to further describe or suggest the deficiencies of Towle, Joundet, Fox and Tucker as they relate to claim 11, from which claims 12 – 16 depend. That is, Yamashita describes a light measuring instrument that is applied to a test object, for example, the skin of the head, and light is reflected inside the test object thereby to detect the light passing through said test object and to image the cerebral interior [see column 5, lines 60-67 and column 6, lines 1-35]. Yamashita does not describe or suggest the "minimum distance search" method as set forth in amended claim 11. Accordingly, by virtue of their dependency from nonobvious claim 11, Applicant respectfully submits that claims 12 – 16 are also nonobvious.

Withdrawal of the rejection is respectfully requested.

Conclusion

Applicant respectfully submits that the present application is in condition for allowance, which action is courteously requested. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105.

Dated: November 21, 2011   Respectfully submitted,

Customer No.: 21874   Electronic signature: /David J. Silvia/
                                                     David J. Silvia
                                                        Registration No.: 49,036
                                                     EDWARDS ANGELL PALMER & DODGE
                                                        LLP
                                                     P.O. Box 55874
                                                     Boston, Massachusetts 02205
                                                     (203) 353-6839
                                                     Attorneys/Agents For Applicant

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